

Form PTO-1449 (Modified)

U.S. Department of Commerce  
Patent and Trademark OfficeAtty. Docket No.  
28341/6276NCPSerial No.  
09/698,4

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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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							Yes	No
✓	B1	WO 91/09955	07/11/91	PCT	—	/		
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✓	B6	EP 0 892 051 A	01/20/99	EPO	—	/		
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✓	B9	WO 99/55734	11/04/99	PCT	—	/		
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✓	B14	WO 00/31258	06/02/00	PCT				
✓	B15	WO 01/07612 A2	02/01/01	PCT				

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, etc.)

✓	C1	Anderson, Human gene therapy, <i>Nature</i> , 392 (supp.): 25-30 (1998).
✓	C2	Aujame <i>et al.</i> , High affinity human antibodies by phage display, <i>Human Antibodies</i> , 8(4):155-168 (1997).
✓	C3	Ausubel <i>et al.</i> , <i>Current Protocols in Molecular Biology</i> , John Wiley & Sons pp. 6.0.3-6.4.10 (1994).
✓	C4	Böhm <i>et al.</i> Regulatory mechanisms that modulate signalling by G-protein-coupled receptors, <i>Biochem. J.</i> 322: 1-18 (1997).
✓	C5	Boulton <i>et al.</i> , ERKs: A family of protein-serine/threonine kinases that are activated and tyrosine phosphorylated in response to insulin and NGF, <i>Cell</i> , 65: 663-75 (1991).
✓	C6	Bruggemann <i>et al.</i> , Strategies for expressing human antibody repertoires in transgenic mice. <i>Immunol. Today</i> , 17(8):391-97 (1996).
✓	C7	Bruggemann <i>et al.</i> , Production of human antibody repertoires in transgenic mice, <i>Curr. Opin. Biotechnol.</i> , 8: 455-58 (1997).
✓	C8	Bulger <i>et al.</i> , Conservation of Sequence and Structure Flanking the Mouse and Human Beta-globin Loci: The Beta-globin Genes are Embedded Within an Array of Odorant Receptor Genes, <i>Proc. Natl. Acad. Sci. (USA)</i> , 96:5129-5134 (1999).

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Applicant  
Vogeli et al.Filing Date  
Oct. 27, 2000Group  
1646

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
✓ C9	Capecci, Altering the genome by homologous recombination, <i>Science</i> , 244: 1288-1292 (1989).	
✓ C10	Choo et al., Promoter-specific activation of gene expression directed by bacteriophage-selected zinc fingers, <i>J. Mol. Biol.</i> 273: 525-532 (1997).	
✓ C11	Cobbold et al., Aequorin measurements of cytoplasmic free calcium, In <i>Cellular Calcium: A Practical Approach</i> , Ch 2 pp. 55-81 (1991).	
✓ C12	Dayhoff, <i>Atlas of Protein Sequence and Structure</i> Vol.5, p. 124 (1972).	
✓ C13	Dooley et al., Binding and <i>in vitro</i> activities of peptides with high affinity for the nociceptin/orphanin FQ Receptor, ORL1, <i>J. Pharm. Exp. Therap.</i> , 283: 735-741 (1997).	
✓ C14	Dunlop et al., Characterization of 5-HT <sub>1A</sub> receptor functional coupling in cells expressing the human 5-HT <sub>1A</sub> receptor as assessed with the cytosensor microphysiometer, <i>J. Pharm. Tox. Meth.</i> , 40: 47-55 (1998).	
✓ C15	Foote and Winter, Antibody framework residues affecting the conformation of the hypervariable loops, <i>J. Mol. Biol.</i> , 224: 487-499 (1992).	
✓ C16	Frandsen and Krishna, A simple ultrasensitive method for the assay of cyclic AMP and cyclic GMP in tissues, <i>Life Sciences</i> , 18: 529-542 (1976).	
✓ C17	Friedmann, Progress toward human gene therapy, <i>Science</i> , 244: 1275-1281 (1989).	
✓ C18	George et al., Evaluation of a CRE-directed luciferase reporter gene assay as an alternative to measuring cAMP accumulation, <i>Journal of Biomolecular Screening</i> , 2(4): 235-240 (1997).	
✓ C19	Greisman and Pabo, A general strategy for selecting high-affinity zinc finger proteins for diverse DNA target sites, <i>Science</i> , 275: 657-661 (1997).	
✓ C20	Harlow and Lane, <i>Antibodies a Laboratory Manual</i> , Cold Springs Harbor Laboratory Ch.6 (1988).	

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Oct. 27, 2000Group  
1646

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

2	C21	Hoogenboom, Designing and optimizing library selection strategies for generating high affinity antibodies, <i>Trends in Biotechnology</i> , 15: 62-70 (1997).
1	C22	Jones et al., Replacing the complementarity-determining regions in a human antibody with those from a mouse, <i>Nature</i> , 321: 522-525 (1986).
2	C23	Kanterman et al., Transfected D <sub>2</sub> dopamine receptors mediate the potentiation of arachidonic acid release in Chinese hamster ovary cells, <i>Molecular Pharmacology</i> , 39: 364-369 (1991).
2	C24	Kettleborough et al., Humanization of a mouse monoclonal antibody by CDR-grafting: the importance of framework residues on loop conformation, <i>Protein Engin.</i> , 4: 773-783 (1991).
2	C25	Kim et al. Design of TATA box-binding protein/zinc finger fusions for targeted regulation of gene expression, <i>Proc. Natl. Acad. Sci. (USA)</i> , 94: 3616-3620 (1997).
2	C26	Kowal et al., A [ <sup>35</sup> S]GTPγS binding assessment of metabotropic glutamate receptor standards in Chinese hamster ovary cell lines expressing the human metabotropic receptor subtypes 2 and 4, <i>Neuropharmacology</i> , 37: 179-187 (1998).
2	C27	Kuntzweiler et al., Rapid assessment of ligand actions with nicotinic acetylcholine receptors using calcium dynamics and FLIPR, <i>Drug Development Research</i> , 44(1): 14-20 (1998).
2	C28	Lajiness et al., D2 dopamine receptor stimulation of mitogenesis in transfected Chinese hamster ovary cells: relationship to dopamine stimulation of tyrosine phosphorylations, <i>J. Pharm. Exp. Therap.</i> , 267(3): 1573-1581 (1993).
—	C29	Lehninger, <i>Biochemistry</i> 2d, Worth Publishers pp. 71-77 (1975).
2	C30	Liu et al., Design of polydactyl zinc-finger proteins for unique addressing within complex genomes, <i>Proc. Natl. Acad. Sci. (USA)</i> , 94: 5525-5530 (1997).
2	C31	McColl et al., Structure-based design of an RNA-binding zinc finger, <i>Proc. Natl. Acad. Sci. (USA)</i> , 96: 9521-9526 (1999).

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Oct. 27, 2000Group  
1646MAR 01 2002  
1600/2800

RECEIVED

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

2	C32	Miller, Human gene therapy comes of age, <i>Nature</i> , 357: 455-460 (1992).
2	C33	Morrison and Oi, Genetically engineered antibody molecules, <i>Adv. Immunol.</i> 44: 65-92 (1989).
✓	C34	Padlan, A possible procedure for reducing the immunogenicity of antibody variable domains while preserving their ligand-binding properties, <i>Molecular Immunology</i> 28(4/5): 489-98 (1991).
2	C35	Parodi <i>et al.</i> , A consensus procedure for predicting the location of $\alpha$ -helical transmembrane segments in proteins, <i>Comput. Appl. Biosci.</i> 10(5): 527-535 (1994).
✓	C36	Radar <i>et al.</i> , Phage display of combinatorial antibody libraries, <i>Curr. Opin. Biotechnol.</i> , 8: 503-508 (1997).
✓	C37	Raming <i>et al.</i> , Identification of a Novel G-protein Coupled Receptor Expressed in Distinct Brain Regions and a Defined Olfactory Zone, <i>Receptors and Channels</i> , 6:141-151 (1998).
✓	C38	Riechmann <i>et al.</i> , Reshaping human antibodies for therapy, <i>Nature</i> , 332: 323-327 (1988).
✓	C39	Sambrook <i>et al.</i> , <i>Molecular Cloning: A Laboratory Manual</i> , Cold Springs Harbor Laboratory pp. 9.47-9.51 (1989).
✓	C40	Segal <i>et al.</i> , Toward controlling gene expression at will: Selection and design of zinc finger domains recognizing each 5'-GNN-3' DNA target sequences, <i>Proc. Natl. Acad. Sci. (USA)</i> , 96: 2758-2763 (1999).
✓	C41	Stables <i>et al.</i> , A bioluminescent assay for agonist activity at potentially any G-protein-coupled receptor, <i>Analytical Biochemistry</i> , 252: 115-126 (1997).
✓	C42	Stratowa <i>et al.</i> , Use of a luciferase reporter system for characterizing G-protein-linked receptors, <i>Curr. Opin. Biotechnol.</i> , 6: 574-581 (1995).
✓	C43	Strosberg, Structure/function relationship of proteins belonging to the family of receptors coupled to GTP-binding proteins, <i>Eur. J. Biochem.</i> 196: 1-10 (1991).

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

2	C44	Sutherland <i>et al.</i> , Some aspects of the biological role of adenosine 3', 5'-monophosphate (cyclic AMP), <i>Circulation</i> , 37: 279-306 (1968).
2	C45	Tempest <i>et al.</i> , Reshaping a human monoclonal antibody to inhibit human respiratory syncytial virus infection <i>in vivo</i> , <i>Bio/Technology</i> , 9: 266-71 (1991).
2	C46	Genbank accession no: AC026090, <i>Homo sapiens Chromosome 11 Clone RP11-658K18 Waterstone et al.</i> , 2000.
2	C47	Wu <i>et al.</i> , Building zinc fingers by selection: Toward a therapeutic application. <i>Proc. Natl. Acad. Sci. (USA)</i> , 92: 344-348 (1995).
2	C48	Verhoeven <i>et al.</i> , Reshaping human antibodies: grafting an antilysozyme activity, <i>Science</i> , 239: 1534-36 (1988).
2	C49	Verma, Gene therapy, <i>Scientific American</i> , 63: 68-84 (1990).

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*Tor C*

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.